

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

MICHAEL BERI

Appl. No.: 10/595,350

Filed: April 12, 2006

For: BRAKE SHOE AND BRAKE LINING WITH KEYED CONNECTION

Attorney Docket No.: CMB0101PUSA

Group Art Unit: 3657

Examiner: Melody M. Burch

RESPONSE TO NON-COMPLIANT APPEAL BRIEF
UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents
Commissioner for Patents
U.S. Patent & Trademark Office
P.O. Box 1450
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Sir:

This is a Response to a Notification of Non-Compliant Appeal Brief mailed September 22, 2010.

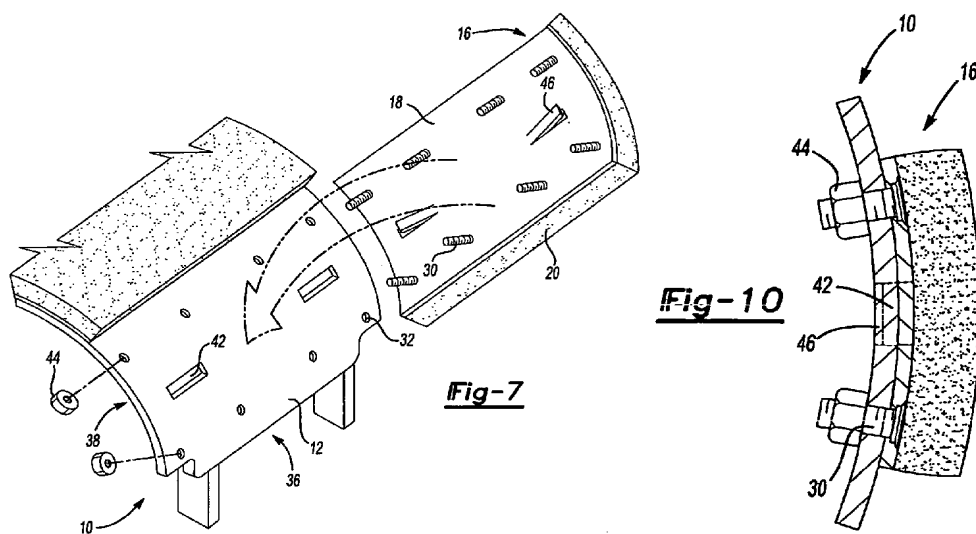
In general, mapping for the claims discussed in the Summary of Claimed Subject Matter section has been included herein to specifically point out at least one place in the disclosure where support can be found.

V. SUMMARY OF CLAIMED SUBJECT MATTER

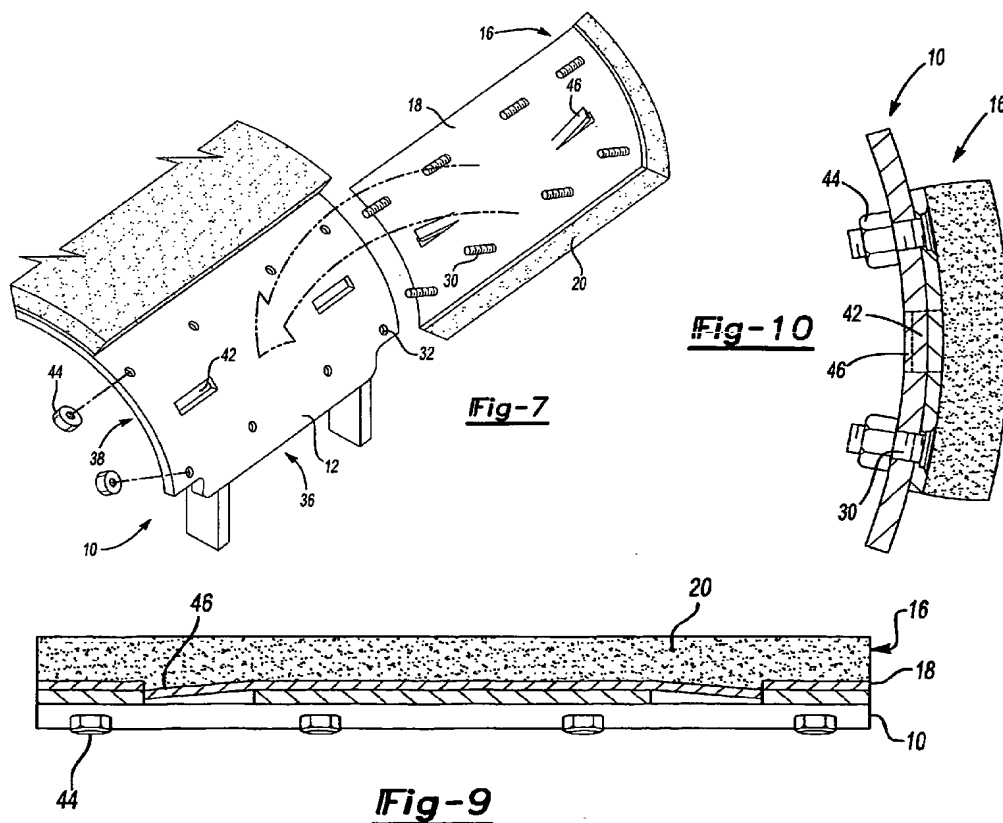
A. Independent Claims 65 and 78 and respective Dependent Claims

1. Independent Claims 65 and 78

With reference to Figures 7 and 10 illustrated below, independent Claims 65 and 78 recite a brake shoe assembly comprising a brake shoe (10) and a brake plate (16). Page 13, lines 29-31; and Figures 7-10. The brake shoe (10) has an outer radial surface (12) that defines a plurality of receptacles (42) and a plurality of bore holes (32). Page 13, lines 29-31; Page 14, lines 6-8; Page 14, lines 15-19; and Figure 7-10. The receptacles (42) pass through the outer radial surface (12). Figures 7 and 10. The bore holes (32) in the outer radial surface (12) are for preassembled fasteners (30). Page 14, lines 6-8.



As illustrated below in Figures 7 and 9-10, the brake plate (16) has a cylindrical backing plate (18) and a frictional brake lining (20). Page 13, line 31 – Page 14, line 4.



As recited in Claim 65 and shown, the cylindrical backing plate (18) includes tangs (46). Page 14, lines 12-22; and Figures 7-10. The tangs (46) are partially severed from the backing plate (18) to mate with respective receptacles (42) for resisting movement of the brake plate (16) relative to the outer radial surface (12) of the brake shoe (10) without the tangs (46) passing completely through the brake shoe (10). Page 14, lines 12-22; and Figures 7-10.

As recited in Claim 78 and shown, the cylindrical backing plate (18) includes projections (46). Page 14, lines 12-22; and Figures 7-10. The projections (46) have edges extending away from the backing plate (18) to mate with respective receptacles (42). The projections (46) mate with respective receptacles (42) for resisting movement of the brake plate (16) relative to the outer radial surface (12) of the brake shoe (10) without the projections (46) passing beyond the receptacles (42) in the brake shoe (10). Page 14, lines 12-22; and Figures 7-10.

The cylindrical backing plate (18) includes a plurality of preassembled fasteners (30). Page 14, lines 5-11; and Figures 7-10. The preassembled fasteners (30) are spaced from the tangs (46) as recited in Claim 65 and the projections (46) as recited in Claim 78. Page 14, lines 5-11; and Figures 7-10. The preassembled fasteners (30) extend away from the brake lining (20) and toward the brake shoe (10) to facilitate alignment of the tangs/projections (46) with the receptacles (42). Page 14, lines 5-11; and Figures 7-10.

The frictional brake lining (20) is molded to the backing plate (18) to form a continuous molded layer (20) that covers each of the preassembled fasteners (30). Page 14, lines 1-4, lines 8-11 and lines 19-29; and Figures 7-10. Furthermore, the brake lining (20) is free of holes extending completely through the continuous molded layer (20). Page 14, lines 24-28 and Figures 7-10.

As recited in Claim 65, the tangs (46) and the receptacles (42) supplement the preassembled fasteners (30) in securing the brake plate (16) to the brake shoe (10). Page 14, lines 12-22; and Figures 7-10. In addition, the tangs (46) and the receptacles (42) particularly resist shear forces between the brake plate (16) and brake shoe (10). Page 14, lines 12-22; and Figures 7-10.

As recited in Claim 78, the projections (46) and the receptacles (42) supplement the preassembled fasteners (30) in securing the brake plate (16) to the brake shoe (10). In addition, the projections (46) and the receptacles (42) resist shear forces between the brake plate (16) and brake shoe (10). Page 14, lines 12-22; and Figures 7-10.

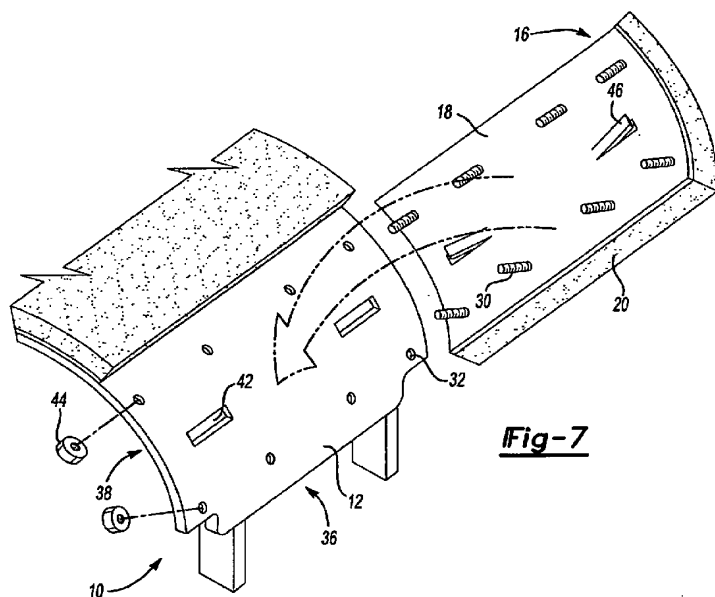


Fig-7

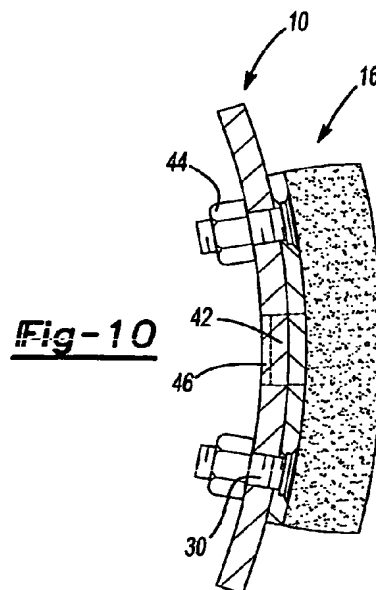


Fig-10

2. Dependent Claims 70 and 79

Dependent Claims 70 and 79 depend from and include the limitations of respective independent Claims 65 and 78. Dependent Claims 70 and 79 recite that the receptacles (42) pass radially inward through the outer radial surface (12) of the brake shoe (10). Page 14, lines 15-16; and Figures 7-10.

3. Dependent Claims 71 and 80

Dependent Claims 71 and 80 depend from and include the limitations of respective independent Claims 65 and 78. Dependent Claims 71 and 80 recite that the frictional brake lining (20) is molded at least partially through each tang/projection opening in the backing plate (18) to facilitate attachment of the frictional brake lining (20) to the backing plate (18). Page 14, lines 1-5 and lines 19-29; and Figures 8-10.

4. Dependent Claims 72 and 81

Dependent Claims 72 and 81 depend from and includes the limitations of respective independent Claim 65 and 78. Dependent Claims 72 and 81 recite that the frictional brake lining (20) is integrally molded into each tang/projection (46) opening in the backing plate

(18) to mechanically attach the frictional brake lining (20) to the backing plate (18). Page 14, lines 1-5 and 19-29; and Figures 8-10.

5. Dependent Claims 73 and 82

Dependent Claims 73 and 82 depend from and includes the limitations of respective independent Claim 65 and 78. Dependent Claim 73 recites that the preassembled fasteners (30) are longer than the tangs (46) to facilitate aligning the tangs (46) relative to the receptacles (42) prior to the receptacles (42) receiving the tangs (46). Similarly, dependent Claim 82 recites that the preassembled fasteners (30) are longer than the projections (46) to facilitate aligning the projections (46) relative to the receptacles (42) prior to the receptacles (42) receiving the projections (46). Page 5, lines 22-26; and Figures 7 and 9-10.

6. Dependent Claims 74 and 83

Dependent Claims 74 and 83 depend from and includes the limitations of respective independent Claim 65 and 78. Dependent Claims 74 and 83 recite that the tangs/projections (46), as recited in respective Claims 65 and 78, are rectangular tangs (46) and the receptacles (42) are rectangular receptacles to receive the rectangular tangs (46). Figures 7-10.

7. Dependent Claims 75 and 86

Dependent Claims 75 and 86 depend from and include the limitations of respective independent Claim 65 and 78. Dependent Claims 75 and 86 recite that the tangs/projections (46), as recited in respective Claims 65 and 78, mate with the receptacles (42) to transfer a substantial shear force from the backing plate (18) to the brake shoe (10) when a brake drum in a vehicle applies the substantial shear force to the brake plate (16). Page 5, lines 7-9; Page 14, lines 12-19; and Figures 7-10.

8. Dependent Claims 76 and 87

Dependent Claims 76 and 87 depend from and includes the limitations of respective independent Claim 65 and 78. Dependent Claims 76 and 87 recite that punching the backing plate (18) forms the tangs/projections (46), as recited in respective Claims 65 and 78, as part of the brake plate (16). Page 14, lines 12-20.

9. Dependent Claims 77 and 88

Dependent Claims 77 and 88 depend from and includes the limitations of respective independent Claim 65 and 78. Dependent Claims 77 and 88 recite that the preassembled fasteners (30) are threaded clinch stud bolts. Page 5, lines 27-28; Page 14, lines 5-8; and Figures 7-10.

Please charge any additional fee or credit any overpayment in connection with this filing to our Deposit Account No. 02-3978.

Respectfully submitted,

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